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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/447,472
Filing Date: November 23, 1999
Appellant(s): ARMSTRONG ET AL.

Eamon J. Wall
For Appellants

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10 January 2006 appealing from the Office action mailed 13 July 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellants' statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,438,596	Ueno et al.	08-2002
6,269,394	Kenner et al.	07-2001
6,163,795	Kikinis	12-2000
6,094,680	Hokanson	07-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 1-6, 19, 22, and 23

Claims 1-6, 19, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,438,596 to Ueno et al. ("Ueno") in view of U.S. Patent No. 6,094,680 to Hokanson ("Hokanson"). This rejection is set forth in a prior Office action, mailed 13 July 2005.

B. Claims 7-9

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueno and Hokanson as applied to claims 6 and 23 above, and further in view of U.S. Patent No. 6,163,795 to Kikinis ("Kikinis"). This rejection is set forth in a prior Office action, mailed 13 July 2005.

C. Claim 21

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueno and Hokanson as applied to claim 19 above, and further in view of U.S. Patent No. 6,269,394 to Kenner et al. ("Kenner"). This rejection is set forth in a prior Office action, mailed 13 July 2005.

(10) Response to Argument

A. Claims 1-6, 19, 22 and 23

1. Claim 1

Summary of Issues

Appellants' independent claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueno in view of Hokanson. Appellants traverse the rejection: "Ueno and Hokanson, alone or in combination, fail to teach or suggest the Appellants' invention, as a whole." (See Appeal Brief at page 16, lines 1-11 [emphasis original].) Appellants' argument is fourfold:

- First, Ueno fails to teach or suggest "partitioning of servers" and thus necessarily fails to teach or suggest "dividing and selectively distributing infrequently requested video assets amongst secondary storage partitions of the plurality of servers"; and, "migrating video assets between storage partitions . . . ." (Appeal Brief, p. 12.)
- Second, Hokanson fails to teach or suggest partitioning of servers, and thus necessarily fails to teach or suggest dividing and selectively distributing infrequently requested assets amongst secondary partitions of the plurality of servers. (Appeal Brief, p. 14.)
- Third, even if Hokanson does teach partitioning of servers, Hokanson still fails to teach or suggest that infrequently requested video assets are divided and selectively distributed amongst secondary partitions of the plurality of servers. (Appeal Brief, p. 14.)
- Fourth, since neither reference teaches or suggests partitioning of servers, the combination of references cannot teach or suggest partitioning of servers. The combination of references thus fails to teach, "each of said servers having a primary storage partition . . . , each of said servers having a secondary storage partition . . . , said infrequently requested video assets being divided and selectively distributed amongst said

secondary partitions of said plurality of servers," as recited in Appellants' claim 1. (Appeal Brief, p. 15.)

Initially, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Additionally, the third issue argues that Hokanson, alone, fails to teach dividing and selectively distributing infrequently requested assets amongst secondary storage partitions of the plurality of servers, even if Hokanson is assumed to teach partitioning of servers (see third issue, above). Yet, in the fourth issue, Appellants offer no argument against the combination of references if Hokanson is assumed to teach partitioning of servers. Rather, Appellants' entire argument against the combination of references (and thus the rejection) hinges on whether either of Ueno or Hokanson teaches partitioning of servers, i.e., "each server having a primary storage partition for storing frequently requested video assets, each server having a secondary storage partition for storing a portion of infrequently requested video assets," as recited at lines 3–6 of Appellants' claim 1. The rejection asserts that Hokanson teaches this so-called partitioning of servers; Appellants' argument to the contrary (see second issue) is not persuasive.

The issues enumerated above are addressed individually below, in numerical order.

Response to First Issue

Ueno, alone, is not relied upon to teach the subject limitations of claim 1: partitioning of servers; dividing and selectively distributing infrequently requested video assets amongst secondary storage partitions; and, migrating video assets between storage partitions. Rather, Ueno teaches the general structure of Appellants' claim 1.

Specifically, Ueno provides a video-on-demand ("VOD") system [see fig. 10]. The system includes a core network [1002] interconnecting a plurality of servers [1001, 1005, 1006]; and, access

networks [1008, 1009] connecting set-top units ("STUs") [1010–1013] to the servers. A given access network [e.g. 1008] connects a group of STUs [e.g., 1010 and 1011] to a respective local server [e.g., 1005]. A local server is arranged for each "headend," where its respective access network is coupled to the core network. Furthermore, Ueno provides several management/control units [1003, 1004, 1007], each of which is coupled to all of the servers via the core network. (Ueno, col. 17, line 64 – col. 18, line 57.) Although illustrated as distinct functional blocks in figure 10, Ueno indicates that the various management and control functions may be connected to the core networks as single unit. (Ueno, col. 21, lines 36–55.)

Thus, Ueno discloses the limitations substantially recited at lines 1-3 of Appellants' claim 1: "In an interactive information distribution system including a network of provider equipment and subscriber equipment, apparatus comprising: a plurality of servers coupled to respective subscriber equipment"; and, additionally, "a manager, coupled to each of said plurality of servers," as recited at line 9 of claim 1.

Although Appellants assert that in Ueno, frequency in access is a predicted or "expected" quantity (Appeal Brief, p. 10), the portions of Ueno cited in support of this assertion refer to the description of the system illustrated at figure 9, which is referred to as "a typical VOD system" (Ueno, col. 17, lines 64-65). The description of figure 10, however, teaches distribution of assets with respect to, simply, "frequency in access"—as opposed to expected frequency in access. (Ueno, column 18, lines 21–27.)

Accordingly, Ueno teaches the structure of the interactive information distribution system, and furthermore teaches selective distribution of video assets amongst the plurality of servers according to video asset request rate. The latter fact is relevant because it implies that the system moves video assets from one server to another when changes in video asset request rates warrants the same. That is, Ueno suggests "routing video assets between the servers in response to video asset requests," as substantially recited at lines 9–10 of Appellants' claim 1.

As noted by Appellants, Ueno does not teach that each of the servers has a primary and secondary storage partition for storing frequently and infrequently requested video assets, respectively. Because there are no secondary storage partitions to begin with, Ueno of course cannot teach infrequently requested video assets being divided and selectively distributed amongst the secondary partitions. Absent a disclosure of primary and secondary storage partitions, Ueno also cannot teach that the manager migrates video assets between said partitions. Finally, Ueno does not disclose that the manager, in particular, routes video assets between servers in response to video asset requests. Nonetheless, Ueno suggests that video assets are, by some means, routed between the servers in such a manner.

Response to Second Issue

At the first paragraph on page 13 of the Appeal Brief, Appellants argue that Hokanson fails to teach partitioning of servers:

> Hokanson teaches a hierarchal storage structure that is implemented as a collection of heterogeneous storage devices. As taught in Hokanson, as certain video content is requested more regularly in comparison to other content, the highly requested content might be moved to a higher performing device, while less requested content may be moved to a lower performing device. As such, Hokanson merely teaches partitioning a network . . . . (not the server partitioning taught in . . . claim 1).

Thus, Appellants argue that partitioning a heterogeneous collection of storage devices amounts to partitioning a network—not partitioning a server. Appellants' argument, however, fails to show how the former is distinct from the latter. Examiner submits that Hokanson teaches server partitioning as described in the supporting specification of Appellants' claim 1.

Partitioning of a server in the context of claim 1 requires, in part, a server having a primary storage partition and a secondary storage partition. As an example of the claimed server, Appellants refer to headend 210 at fig. 2 of the instant patent application (See Appeal Brief, p. 7). Headend 210 comprises, among other things, a video stream server 214 and primary storage device 216. Furthermore, figure 2 and

the related text at pages 9–10 of the specification indicate that storage device 216 is divided into a primary storage partition 218 and a secondary storage partition 219. Thus, the claimed server comprises a video stream server and a storage device having primary and secondary storage partitions.

Stream server 216 retrieves video assets from storage and transmits them to the appropriate subscribers: "If [a] requested asset is locally stored (i.e., at the primary storage partition on the primary storage device 216), the local video stream server 214 accesses and delivers the locally stored video asset to the requesting subscriber's equipment . . . ." (See Appellants' specification at page 10, lines 23–26.)

Storage device 216 comprises a plurality of discrete, interconnected storage devices: "In the exemplary embodiment, the primary storage device 216 comprises an array of . . . (SCSI) or fiber channel hard drives." (Appellants' specification, p. 9, lines 12–14.) The array of storage devices represented by storage 216 is divided into at least two partitions: "[S]torage device 216 is apportioned into at least two storage partitions designated as primary storage partition 218, and a second storage partition 219." (*Id.*, lines 14–16.) Storage device 216 thus represents a collection of storage devices. This collection of storage devices is in some manner "apportioned" into a primary storage partition and a secondary storage partition. The specification provides no indication as to how, in particular, the collection of storage devices is apportioned. At most, the arrangement is limited to a set of storage devices whose collective storage space is represented by two or more independent, logical or physical portions (i.e., primary and secondary partitions).

Thus, the server of claim 1 comprises a video stream server coupled to a collection of storage devices, which is divided in some manner to create primary and secondary storage partitions.

Server 132 shown at figure 5 of Hokanson corresponds to Appellants' video stream server 214: "The server 132 is a continuous media server which transmits video data maintained on video storage 138." (Hokanson at col. 10, lines 35–37.) Storage 138 (Hokanson, fig. 5) corresponds to Appellants' storage device 216: "The storage 138 is implemented as a collection of independent storage devices or

arrays 140(1), 140(2), . . . , 140(m) which store different program content." (Hokanson at col. 10, lines 36–40.) Furthermore, storage 138 is divided into different logical portions, i.e., hierarchal levels (see col. 10, lines 40–58), which store video assets having different request rates, respectively (see col. 11, lines 5–21).

Hokanson's storage 138 and Appellants' storage device 216 are both implemented as collections of storage devices. Moreover, Hokanson's storage array 138 and Appellants' storage array 216 are both apportioned into at least two partitions on which frequently and infrequently requested video assets are stored, respectively. As such, it is unclear how Appellants' suggestion that Hokanson teaches "partitioning a network" or otherwise partitioning a collection of heterogeneous storage devices fails to teach a server having primary and secondary storage partitions, as claimed. Indeed, if Hokanson "merely teaches partitioning a network", as Appellants insist (Appeal Brief, p. 13 [emphasis original]), then Appellants' specification merely teaches the same.

Appellants apparently assume that the claimed server having a primary and secondary storage partition requires either (1) partitioning a single, discrete storage device or (2) partitioning a collection of homogeneous storage devices: "Hokanson teaches . . . a hierarchal resource storage structure implemented as a collection of heterogeneous storage devices. . . . Hokanson is completely devoid of any teaching or suggestion of partitioning any of the higher performing device or lower performing devices for storing different categories of vide content in different partitions." (Appeal Brief, p. 13.) As noted above, Appellants' specification indicates that the partitioned storage device in fact represents an array or of discrete storage devices (i.e., hard drives), with no indication as to how the individual hard drives are allocated to the primary and secondary storage partitions. Thus, the first requirement (1) noted above lacks basis in Appellants' specification. Similarly, the second requirement (2) lacks basis: there is no indication in Appellants' specification that the plurality of storage devices comprising the array be

homogeneous or otherwise identically performing devices. Moreover, even if such detail were disclosed in Appellants' specification, claim 1 is not limited accordingly.

As such, Examiner submits that Hokanson teaches partitioning of servers within the meaning of Appellants' claim 1. That is, Hokanson discloses a server having a primary storage partition and a secondary storage partition. Furthermore, as set forth in the rejection and discussed above, Hokanson teaches storing frequently and infrequently requested video assets on the primary and secondary storage partitions, respectively.

Response to Third Issue

As to the remaining features of claim 1, Appellants submit, "since Hokanson fails to teach or suggest that each of the plurality of servers has a primary storage position for storing frequently requested video assets and a secondary storage partition for storing a portion of infrequently requested video assets, Hokanson must also fail to teach or suggest that the infrequently requested video assets are divided and selectively distributed amongst the secondary storage portions of the servers, as taught in Appellants' . . . claim 1." (Appeal Brief, p. 14.)

As discussed above, Hokanson discloses partitioning a server within the meaning of Appellants' claim 1. In the alternative, Appellants assert, "even if Hokanson did teach partitioned servers . . . , Hokanson is still completely devoid of any teaching or suggestion that infrequently requested video assets are divided and selectively distributed amongst the secondary portions of the plurality of servers, as taught in . . . claim 1." (Appeal Brief, p. 14.) Specifically, Appellants assert, "[s]ince an off-line storage facility simply cannot respond to user requests . . . . Hokanson simply does not teach that infrequently request [*sic*] movies are distributed amongst specific partitions associated with each server in a plurality of servers." (Appeal Brief, p. 14.)

Hokanson, alone, is not relied upon for teaching this limitation as it pertains to distribution of

assets amongst plural servers. As noted above and discussed in detail below with respect to the fourth issue, Ueno teaches selective distribution of content amongst plural servers; Hokanson teaches a manager for doing so in response to subscriber requests (see col. 9, lines 33–54).

In addition, Examiner disagrees with Appellants' interpretation of the reference regarding infrequently requested assets. Hokanson teaches distributing infrequently requested assets amongst a server's secondary storage partitions. Furthermore, Hokanson does so without removing and archiving infrequently requested assets in off-line storage facilities.

Specifically, Hokanson teaches two methods of realizing the disclosed hierarchal resource storage structure: (1) a hierarchy of different storage devices, where higher-rated content is stored on higher-performance storage mediums; or, (2) replication protocols, where higher-rated content is replicated multiple times. (See col. 10, lines 35–50.) The rejection relies on the first implementation: a hierarchy of storage devices where higher rated content is stored on higher performing devices. (See "high performing/high cost" and "low performance/low cost"; Office Action, p. 5.) Archiving rarely or never requested videos in off-line storage facilities is discussed specifically in reference to the second implementation: a storage hierarchy in which a video's hierarchal level is managed using replication protocols. (Hokanson, col. 10, lines 25–30.)

In addition, the cited portion of Hokanson discloses that along with the primary partition for storing the most frequently requested titles, there exist at least two additional partitions for storing content rated at less than the highest content rating: "Initially, the movie is stored at a middle hierarchal level within the video storage 138. The content manager 142 monitors the requests from the subscribers for the new movie." Furthermore, "The content manager 142 evaluates whether the movie should be moved within the storage hierarchy to a higher or lower level based upon the subscribers' requests . . . ." (Hokanson, col. 11, lines 5–20.) Each of these additional storage partitions is indicated as "within" the storage hierarchy represented by storage 138 of figure 5. Hokanson discloses that videos stored thereon

are accessible for transmission by server 132 to subscribers. (See col. 10, lines 35–48.)

Thus, there are at least three levels within the storage hierarchy (i.e., "middle", "higher", and "lower"). A video asset is moved amongst these levels according to the number of subscriber requests for the asset. The hierarchal levels are realized by partitioning storage 138 such that there exist higher and lower performance storage partitions on which particular content may be stored. The most frequently requested content is stored on the primary storage (i.e. high performance) partition. The remaining content is distributed amongst the secondary (i.e., lower performance) partitions.

Response to Fourth Issue

Regarding Ueno and Hokanson in combination, Appellants submit, "since servers are not partitioned in Ueno, and servers are not portioned in Hokanson, a combination of Ueno and Hokanson simply cannot teach partitioning servers in accordance with Appellants' invention of . . . claim 1." (Appeal Brief, p. 15.)

Returning to the systems illustrated in figures 9 and 10 of Ueno: "The local server is arranged for each area which contains at least one headend (HE) . . . ." (See col. 18, lines 15-20.) Thus, Ueno teaches a plurality of interconnected, interactive (i.e., video-on-demand) television headends and associated storage structures. Furthermore, Ueno teaches that each headend serves a respective group of subscribers.

As discussed above, Hokanson discloses a server having a primary storage partition for storing frequently requested video assets and a secondary storage partition for storing a portion of infrequently requested video assets; and, a manager migrating video assets between storage partitions in response to a video asset request rate traversing a threshold rate. Hokanson furthermore provides motivation for configuring an interactive television headend as such: "As in the other network implementations of FIGS. 1 and 4, the headend operator can define a cost/availability balance which establishes a preferred balance between offering a composite of content at various hierarchal levels and a cost to supply the content

within the composite at those various hierarchal levels." (See col. 10, lines 59–64.) The cost/availability balance achieved with the storage arrangement of "also enables the headend operator to dynamically adjust to changing consumer preferences automatically . . . ." (See col. 11, lines 35–40.) Thus, Hokanson provides motivation for employing a server (i.e., headed and associated storage structure) having primary and secondary storage partitions, as claimed.

Although Hokanson describes only one server with respect to the interactive television headend of figure 5, Hokanson applies the advantages of maintaining a cost/availability balance to networks comprising multiple, interconnected servers. (See col. 9, lines 33-48.) Specifically, Hokanson discloses that where each server is coupled to a respective client or group of clients, a manager coupled to the servers may route particular content between the servers in response to client requests. (See col. 9, lines 48-54.)

Accordingly, it would have been obvious one of ordinary skill in the art at the time of Appellants' invention to modify each of the plurality of servers (i.e., headends and associated storage) of Ueno with primary and secondary storage partitions (i.e., hierarchal storage) as taught by Hokanson, thereby allowing each of the plurality of servers disclosed in Ueno to automatically adapt to changing subscriber demand in its respective service area.

Additionally, it would have been obvious employ the manager of Ueno to route video assets between said plurality of servers in response to subscriber requests as taught by Hokanson, such that the advantages of the cost/availability balance may be applied to the network as whole.

The resulting system teaches a plurality of servers, each having primary and secondary storage partitions, as claimed. Furthermore, video assets are routed between servers in response to subscriber requests in order to optimize the cost/availability balance for the distribution system as a whole and each server migrates assets between its primary and secondary storage partitions in order to optimize the cost/availability balance for its respective locality. Thus, each server has stored thereon a set of video

assets: frequently requested assets being stored on the server's primary storage partition, and infrequently requested assets being stored on the server's secondary storage partitions. The system as a whole therefore comprises a set of infrequently requested video assets; each server in the system stores a subset of these infrequently requested assets on its secondary storage partition. In this way, the infrequently requested video assets are divided and stored amongst said secondary storage partitions of the plurality of servers.

The combination of Ueno and Hokanson therefore teaches that infrequently requested assets are divided and selectively distributed amongst the secondary storage partitions of the plurality of servers as recited in Appellants' claim 1 and described at page 10, lines 6-9 of Appellants' specification:

> The secondary storage partition 219 is used to store portions of the infrequently requested video assets. An entire library of infrequently requested assets is divided and stored amongst the plurality of head-ends 210 at each of the secondary storage partitions on their respective primary storage devices 216.

Accordingly, Ueno and Hokanson together teach a plurality of servers as claimed; each of said servers having a primary storage partition for storing frequently requested video assets, each of said servers having a secondary storage partition for storing a portion of infrequently requested assets, said infrequently requested video assets being divided and selectively distributed amongst said secondary partitions of said servers; and, a manager for routing video assets between servers in response to subscriber requests, and migrating video assets between storage partitions in response to a video asset request rate traversing a threshold rate.

2. Claims 2-6

Claims 2-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ueno in view of Hokanson. Claim 2 depends form claim 1 and thus incorporates all the limitations thereof. Appellants contend that claim 2 is therefore not taught by the combination of references for the same reasons as

claim 1. (Appeal Brief, p. 16.) Examiner submits, however, that claim 1 is unpatentable over Ueno in view of Hokanson for the reasons discussed above. Thus, claim 2 is not patentable for this reason.

Appellants additionally assert that the portions of Hokanson cited in the rejection fail to teach additional limitations recited in claim 2:

> [T]he manager allocates the video assets to at least one of said plurality of servers for storage on the primary storage partitions when the asset request rate traverses a threshold rate, and the manager stores the video assets on the second storage partition when the asset request rate does not traverse the threshold rate. (Appeal Brief, p. 17)

Appellants refer specifically to Hokanson at column 11 and lines 23-30, which discusses the movement of content within the storage hierarchy by way of replication protocols: storing multiple copies of more popular content; and, removing and archiving in off-line storage less popular content to free storage space for the more popular titles. Appellants contend that (1) replication of a video asset on a single storage facility is not allocation of a video asset across at least one of a plurality of servers for storage on primary storage partitions as claimed (Appeal Brief, p. 16); and, (2) removing and archiving unpopular assets is not storage of video assets on secondary storage partitions as claimed. (Appeal Brief, p. 17.)

Both of Appellants' arguments ignore the whole of the cited portion of Hokanson, i.e., column 11, lines 16-30. As discussed above, Hokanson teaches a hierarchal resource structure in which each video asset stored thereon is rated at a particular hierarchal level according to various factors, including request rate. (See col. 10, lines 49–58.) The storage hierarchy can be implemented in one of two ways: (1) a hierarchy of different storage devices, wherein higher-rated content is stored on higher-performing storage devices and lower-rated content is stored on lower-performing storage devices; or, (2) replication protocols, wherein higher-rated content is replicated multiple times. The rejection relies on the first implementation. The teachings of Hokanson referred to by Appellants with respect to replicating and archiving pertain to the second implementation.

The portion of Hokanson cited in the rejection teaches a manager 142 moving content stored

within the storage hierarchy to higher or lower levels based upon subscriber requests and a defined cost/availability balance. (See col. 11, lines 15–23.) In first implementation of the hierarchy, using higher and lower performing storage devices, content is moved to higher performing devices as it becomes more popular and lower performing devices as it becomes less popular. The higher and lower performing devices correspond to the claimed primary and secondary storage partitions for the reasons discussed with respect to claim 1. Thus, Hokanson teaches that the manager allocates video assets to the primary or secondary storage partition of a server.

Hokanson at column 11 and lines 23-30 also establishes that content is moved up or down within the storage hierarchy dependent upon some threshold request rate, evidenced by the distinction drawn between movies requested by large numbers of subscribers, and rarely or infrequently requested movies. Using replication protocols, a movie may be replicated or removed depending on its request rate and the threshold rate. This exemplary discussion of the request rate threshold, as it pertains to replication protocols, does not negate the fact that such threshold rates are used to determine the hierarchal level at which assets are rated in other management schemes.

Thus, where the storage hierarchy is implemented using higher and lower performing storage devices, it follows that (1) the manager allocates video assets to at least one of the servers for storage on its primary storage partition when the asset request rate traverses a threshold rate; and (2) the manager stores the video assets on the second storage partition when the asset request rate does not traverse a threshold rate, as recited in claim 2.

Accordingly, the portions of Hokanson cited in the rejection of claim 2 teach the subject matter claimed therein.

3. Claims 19, 22, and 23

Regarding claim 19, Appellants argue that Ueno and Hokanson fail to teach the claimed

invention, as a whole, for the same reasons discussed above with respect to claim 1. In particular, Appellants assert that Hokanson fails to teach partitioning of servers, determining an asset request rate for each of the video assets stored in each server, comparing said assets with a threshold rate, and migrating said video assets between primary and secondary storage partitions based on whether or not the asset rate exceeds said threshold rate (Appeal Brief, p. 19).

As to partitioning of servers, Appellants offer the same argument against Hokanson introduced with respect to claim 1. Examiner submits that for the reasons discussed above, Hokanson teaches partitioning of servers, as claimed.

As to determining video asset request rates, comparing these rates to a threshold rate, and migrating video assets between primary and secondary storage partitions based on a comparison between an asset's request rate and a threshold rate, Appellants provide similar arguments to those discussed with respect to claims 1 and 2. Examiner submits that these features are met by the combination of Ueno and Hokanson as discussed above with respect to claims 1 and 2.

Appellants additionally argue that the combination of Ueno and Hokanson fails to teach partitioning of servers for the same reasons discussed above with respect to claim 1. Examiner submits that Hokanson teaches partitioning servers for the reasons discussed with respect to claim 1. Furthermore, the combination of references teaches the claimed subject matter as also discussed with respect to claim 1, above.

Accordingly, claim 19 is met by the combination of Ueno and Hokanson as set forth in the rejection and discussed above under heading "A", subheadings 1–2.

B. Claims 7-9 and 24

Regarding claims 7-9 and 24, Appellants argue that these claims depend either directly or

indirectly from claims 1 and 19; Ueno and Hokanson fail to render obvious either of claims 1 and 19; and Kikinis fails to overcome the deficiencies of Ueno and Hokanson discussed with respect to claims 1 and 19. Therefore, Appellants contend, claims 7-9 and 24 are allowable for the same reasons as claims 1 and 19.

Claims 1 and 19 are unpatentable over Ueno in view of Hokanson for the reasons discussed above. Kikinis is not relied upon to overcome the alleged deficiencies with respect to the combination of references as applied to claims 1 and 19. Accordingly, claims 7-9 and 24 are not allowable over the combination of Ueno, Hokanson, and Kikinis for the reasons Appellants provide.

C. Claim 21

Regarding claim 21, Appellants argue that this claim depends from claim 19; Ueno and Hokanson fail to render obvious claim 19; and Kenner fails to overcome the deficiencies of Ueno and Hokanson discussed with respect to claim 19. Therefore, Appellants contend, claim 21 is allowable for the same reasons as claim 19.

Claim 19 is unpatentable over Ueno in view of Hokanson for the reasons discussed above. Kenner is not relied upon to overcome the alleged deficiencies with respect to the combination of references as applied to claim 19. Accordingly, claim 21 is not allowable over the combination of Ueno, Hokanson, and Kenner for the reasons Appellants provide.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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1 March 2006

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